

**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1 – 37. (Canceled)

38. (New) A transgenic *Drosophila* whose genome is constituted by :

(a) inserting a DNA encoding for a protein having SEQ ID No.1 in a P-element vector,

(b) transforming the vector having the DNA encoding for the protein having SEQ ID No. 1 into a strain w *Δ2-3 Ki* of *Drosophila* embryo, wherein the protein having SEQ ID No. 1 leads to one or more developmental abnormality of the *Drosophila* embryo,

(c) crossing the *Drosophila* fly obtained from the embryo of step (b) with another transgenic line of *Drosophila* fly having *GAL4* promoters, and

(d) obtaining a transgenic *Drosophila* fly from the crossed *Drosophila* flies of step (c), wherein the transgenic fly of step (d) express SEQ ID No. 1.

39. (New) A transgenic *Drosophila* as claimed in claim 38, wherein the P-element vector in step (a) is a pCaSpeR-UAS.

40. (New) A transgenic *Drosophila* as claimed in claim 38, wherein the transgenic fly obtained in step (d) comprise promoters from *vg-GAL4*, *ptc-GAL4* and *ey-GAL4*.

41. (New) A transgenic *Drosophila* as claimed in claim 38, wherein the *Drosophila* fly obtained in step (d) has an abnormality selected from group consisting of adult epidermal development, incomplete development of dorsal tergites that and are devoid of pigmentation., ectopic expression of Decapentaplegic (Dpp), leg duplications, loss of wing and inappropriate patterning of ommatidia.

42. (New) A method of performing an *in vivo* assay for screening and validating efficacy of pharmaceutical drugs, the method comprising the steps of:

- (a) selecting transgenic *Drosophila* flies expressing proteins having SEQ ID No.1
- (b) administering different concentrations of pharmaceutical drugs to the selected *Drosophila* flies of step (a), and
- (c) screening the phenotypic changes.

43. (New) A method as claimed in claim 42, wherein drugs are selected from the group of compounds consisting of analgesics, antipyretics, anti-inflammatory and antineoplastics.

44. (New) A method as claimed in claim 42, wherein in step (b) the concentration of drugs is in the range of 50 to 500 µg/ml.

45. (New) A method as claimed in claim 42, wherein the compound is an anti-cancer drug.

46. (New) A method as claimed in claim 44, wherein the transgenic *Drosophila* comprise abnormalities selected from adult epidermal development, incomplete development of dorsal tergites that and are devoid of pigmentation., ectopic expression of Decapentaplegic (Dpp), leg duplications, loss of wing or inappropriate patterning of ommatidia.